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Ethical Aspects within Human Cloning

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Abstract

The fast evolution of the society and the various economic and social sectors requires an ethical approach of how the information is used. This aspect does not only have legal implications, but also appeals to the moral conscience of the individual. Since the artificial cloning of Dolly the sheep, scientists have launched the question whether in a not so distant future a human being will also be created artificially. According to the legislation in force, human reproduction is forbidden; yet, in some countries, therapeutic cloning is no longer illegal.

Keywords: human cloning, dignity, ethics, bioethics, superhuman.

1.Introduction

Along with the fast development of the society and the new inventions in technology, genetics, informatics, and so on, there arose the problems related to their use. The new technologies have triggered either risky applications - genetic manipulation, weapons of mass destruction, control of information through the interference with the private life of individuals - or negative effects - such as the pollution of the planet, drastic depletion of natural resources - or applications made without an analysis of their long-term effects and consequences (Maxim, 2010, pp.24-25). Some achievements in technology such as cloning, euthanasia, abortion or even the intemperate drug interventions with unpredictable and uncontrollable mutations upon the human being (Maxim, 2010) could serve for morally questionable purposes.Using information for purposes that are injurious to the human society draws attention both from the legal as well as the ethical point of view, since it should be used in order to achieve welfare and not for the purpose of destroying mankind.

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Human cloning is a controversial topic involving legal, political, ethical and religious issues related to human integrity and human rights (Boila, L. R., 2013). Creating an individual that is genetically identical to another one has caused reactions in all the social spheres.This controversial issue raises the following ethical dilemmas: 1. Will science create a superhuman endowed with a higher level of intelligence and a higher level of consciousness? 2.Will man make use of science in order to overpower the entire human race, triggering the risk of recreating a slavery era?

The aim of this paper is to highlight several risks to which mankind can be exposed if reproductive cloning enjoys the rights that would derive from global legalization on the one hand and from common consent on the other hand. Therefore, we shall make a brief review of several approaches taken to this topic, followed by a reflexive analysis.

2. Theoretical assumptions, hypotheses and analyses on cloning

In terms of genetics, the end of the twentieth century was marked by scientific findings, a new dimension of engineering being thus outlined. Genetic engineering can be defined as a set of laboratory methods and techniques that allow the manipulation of the genetic material without sexual processes, thus obtaining organisms with new combinations of hereditary characters (Patrascu, 1983). Therefore, genetic engineering deals with manipulations at both the genes' level as well as the cells' level, thus achieving new organisms - from the simplest forms of life to plants or animals. In a relatively short period of time, "genetics, the science of the creatures' heredity" (Raicu, 1984, p.134) showed that the genes are those which provide the genetic side of generations, being composed of nucleic acids, macromolecular chemical substances, composed of smaller units, called nucleotides, whose number and sequence vary from one species to another (Raicu, 1984, p.134). Based on this, the development of genetic engineering has led to another field of research, that of cloning. Although in the field of horticulture this practice is already known, the experiments in the field of genetics have led to amazing findings; therefore, in 1996 the sheep with the code name 6LL3, named Dolly, was cloned; its birth was not made public before February 22, 1997 and afterwards 4 clones of the same Dolly were created. The event drew the attention of the whole world; "Nature" magazine published the original story, being followed by other journals, scientific and religious publications, the latter warning about human cloning (Lester D., &Hefley, J., 2000).

For a better understanding, the theoretical approach to the concept of cloning is necessary. It involves the creation of an organism which is genetically identical to another one, without sexual contact, but the experts in the field say that twins are actually the natural product of cloning. This phenomenon takes place every 150 births, so we can say that the probability of natural cloning of the human being is more than frequent.

We do not know exactly when life began on earth, but starting with the development of an organized nucleus, a new species of single-celled organisms called eukaryotes endowed with motion, a nucleus and mitochondria was created, emerging from the symbiosis of the micro-organisms which were combined in order to form a single one (Bernal Crespo, S.J., 2006). In a short period of time, scientists discovered the mysteries of the cellular structure, entered the composition of the nucleus and clarified the role of the deoxyribonucleic acid (DNA), its chemical composition, and thus decoded its messages (Patrascu, 1983). Since 1981, mice, sheep, cows, monkeys, pigs, goats, cats, rabbits and horses have been cloned and two cloning techniques have been highlighted: Pre-implanted embryo splitting [...] and the transfer of cell nuclei from new-born individuals (Huguet Santos, L., 2004).

Based on these clarifications, we shall analyze cloning from two perspectives: the therapeutic one and the reproductive one; therapeutic cloning does not involve "building" organisms; the parent embryonic cells are harvested for use in medical treatments, in order to produce tissue cells, muscle cells, etc. Reproductive cloning involves creating an exact duplicate of an organism that exists or existed, in order to prevent the extinction of certain endangered species.

3. Scientific findings - Ethical and moral values

Ever since Dolly was cloned, the media, the political and religious sphere and the public opinion have reacted in different ways regarding the scientific progress, raising the problem of human cloning and the morality of such an action.

From the point of view of the scientific revolution, the basic research used by Wilmut in order to create Dolly the sheep was the following: first a specialized adult cell was deprived of nutrients in order to become inactive. Secondly, an egg cell was taken from a Scottish Blackface sheep and all the DNA chains were extracted from it, eliminating any genetic similarity specific to the Scottish Blackface species. In Ohio, on the other hand, a mouse with outstanding physical performances was created by using genetic engineering, by altering the genetic sequence that coordinates the metabolism of glucose (Sandu, A., 2012), this being considered of prime importance due to the fact that the biological constraints had been overcome.

The moment of achieving clones of a living beinghas already been marked by these two examples (Savulescu, J. 2007); thus, it is only a matter of time before we see replicas of personalities that have marked the history of mankind in one way or another. The legal framework in force in all countries of Europe and North America considers such actions to be illegal, since the human rights would be infringed. The human values would be endangered, jeopardizing the dignity, uniqueness and integrity of the human being. Thus, human cloning involves several dimensions regarding the legal, ethical, scientific, medical and religious aspects, which differ from one region to another and from one culture to another. For example, in the case of the countries which have a majority Christian population, religion is invocated: "God created man in his own image," and it is considered that any attempt of creating a human being in the laboratory is a blasphemy, an offence to the divinity.

The church also expressed their views on this issue, pointing out the fact that the reproduction techniques - such as sperm and egg cell donation, surrogate motherhood, heterologous artificial fertilization, which involve the uterus or gametes of other persons - are not acceptable from the ethical point of view, because such practices bring prejudices to the right of the foetus to be born of a father and a mother both from the biological as well as the legal point of view (Catholic Church. PontificumConsilium de Iustitia et Pace, 2006).

4. Reflections on dignity in the context of human cloning

The Homo sapiens individualis the only one endowed with consciousness and intelligence and cannot be regarded as an object of scientific research in genetic engineering,by ignoring its quality of subject.

In developed societies that consume a wide range of items, but never persons, issues such as returning the product provided it does not meet the quality standards are raised. Creating an individual that is consistent with certain standards required by the buyer entails the possibility of failure and thus returning or destroying the product which is considered defective.

One of the most controversial issues are those related to the violation of human dignity both in the case of human cloning as well as reproductive cloning. This issue raises a multitude of questions because scientific achievements limit the existence of the individual to the sale and purchase contracts, the individual being considered a simple commodity that can be purchased in order to meet certain needs, such as, in this case, organ transplantation. The case of therapeutic cloning, the creation of embryos for the purpose of harvesting specialized cells involves violating the dignity of the unborn human being and thus of the entire human species because human life is no longer considered a supreme value, the individual being denied the right to his own life. In this context, the principle of non-injury is violated - human life is generated for the express purpose of destroying it.

In reproductive cloning, one raises the problem regarding the right of ownership over a human being: the eventual development of the embryo in an artificial uterus raises questions regarding the parental rights and obligations in relation to the created human being. The guarantee period of the embryo is estimated until it is

destroyed and in this regard the human being is considered to be a consumer good, subsequently intended to be killed.

At the same time, the creation of a human clone for therapeutic purposes can also be interpreted in terms of the right of ownership: using organs may involve a reduced quality of life and even death.

Creating human beings by manipulating the genetic characteristics draw attention to another topic related to integrity: destroying self-awareness and the ability to dispute or take decisions involves the annihilation of the individual's autonomy, the individual being considered an object that can be manipulated and that can end up taking possession of an individual or a group of individuals.

What started as a form of treating manking from diseases and increasing life expectancy can lead to the perverse effects of this scientific finding.

4.1. Risksand perverse effects

We shall enumerate some of the potential risks that humanity could be exposed to in casehuman cloning is no longer outside the law:

- The species may lose viability, given that only certain genes will perpetuate in an identical manner from one generation to another;
- The freedom to manipulate the genetic material, and thus to adulterate the human species(which no longer has anything natural in it) may lead to adaptive malfunctions;
- Soft slavery - the creation of a superhuman belonging to a trans-human species, could create a conflagration between the two humanoid species;
- Slavery - which involves creating an individual with superior intellectual and physical qualities could overpower the human society.

5. Conclusions

Researchers in the field of genetic engineering should not consider the human individual as a research object, under the pretext of "improving the quality of life", but as a Subject itself. Reproductive and therapeutic cloning could be considered immoral both from the bioethical as well as the legal and religious perspective. On the one hand, there is the risk of violating the fundamental human rights: the individual is created for a pragmatic purpose and then is killed. Thus, the right over life is arbitrarily taken by third parties,and the existence of the living being is abused –its practical utility is sought. On the other hand, these practices could also involve an involution of the human species by limiting the consciousness. From the moral point of view, we claim that the use of information on genetic engineering shows a series of shortcomings because the freedom of manipulating the genetic material involves limiting the rights of the clone, and why not, even the ownership of the evolving self.

Dignity, the right to life, to consciousness and intelligence are supreme values of the human species and inalienable birthrights. Denying these values entails the possibility of subjugating the individual and thus its right to evolve. Human cloning could generate a new form of slavery. We also ask the question whether the Hippocratic *primum non nocere* imperative is being defied.

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